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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,763	07/10/2001	Gregory N. Smallwood	GNS-165	8517
24119	7590	02/03/2004	EXAMINER	
SHERMAN D PERNIA, ESQ., PC 1110 NASA ROAD ONE SUITE 450 HOUSTON, TX 77058-3310			CHIANG, JACK	
			ART UNIT	PAPER NUMBER
			2642	7

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901763

Applicant(s)

G.N. Smallwood

Examiner

J. Chiang

Group Art Unit

2642

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—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE -3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 12-12-03.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-14 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-14 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

CLAIMS

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 5528235).

Regarding claim 1, Lin shows:

A housing (20) containing an array of actuators (see figs. 3-5);

The array having four rows of three manually operated actuators per each row (see 20);

Each manually operated actuators (see figs. 3-5) being selectably operable to provide one of the three discrete outcomes (see letters a-z).

Regarding claims 2-14, Lin shows:

A push button assembly and a switch assembly (figs. 1-5);

Closing the switch individually or closing switches together to provide one outcome (see fig. 5);

The selection of any one of the switches (fig. 4);

The push button assembly which can be a rocker with center button (fig. 6);

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The single or double pole, single throw momentary switches (figs. 3-5);

A processor and a discriminator circuit (such as operation in fig. 5);

At least one manually operated actuator (24J-O);

The manually operated actuator comprises three selectably closeable electric circuit configurations (figs. 3-5).

3. Claims 1-2, 4-6, 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnan (US 6377685).

Regarding claim 1, Krishnan shows:

A housing (10) containing an array of actuators (see figs. 1-2, 7 etc.);

The array having four rows of three manually operated actuators per each row (see 10);

Each manually operated actuators (see figs. 1-2, 7 etc.) being selectably operable to provide one of the three discrete outcomes (see letters a-z).

Regarding claims 2, 4-6, 9-14, Krishnan shows:

A push button assembly and a switch assembly (figs. 1, 6a, or 7, 10a);

The selection of any one of the switches (figs. 1, 6a, or 7, 10a);

The push button assembly (figs. 1, 7) which can be a rocker with center button (fig. 7);

The single or double pole, single throw momentary switches (figs. 1, 7);

A processor and a discriminator circuit (col. 23, lines 61-67, col. 24, lines 1-53);

At least one manually operated actuator (134, or 136);

The manually operated actuator comprises three selectably closeable electric circuit configurations (figs. 1, 6a, or 7, 10a).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Lin.

Regarding claim 3, 7-8. Krishnan shows the switches, the combination rocker and button having center recess (figs. 1, 6a, or 7, 10a, 8).

Krishnan differs from the claimed invention in that it does not show to close two switches together to provide one outcome.

However, Lin teaches providing a button which an individual switch can be selected or close two switches together to provide one outcome (figs. 3-5).

Hence, the concept of providing switches on a button is well taught by both Krishnan and Lin. Therefore, it would have been obvious for one skilled in the art to use Krishnan as it is, or to modify Krishnan to provide a feature of closing two switches to provide one outcome as taught by Lin. This is simply a variation of Krishnan because the basic concept of entering the data is substantially unchanged, and such modification would properly only require to modify the software to recognize that certain switches are closed to provide a signal as taught by Lin.

ARGUMENT

6. In response to the remarks (pages 2-7), in page 2, applicant states that the Office failed to establish a prima facie case of anticipation....

In page 3, applicant first argues that "claim 1 ... one of three discrete outcomes", Lin only show two discrete outcomes The examiner disagrees. In Lin, col. 5, lines 32-34, Lin states "... each of keys ... can be actuated in **five** positions when user's finger pressure is applied to each of the five key facets or areas 50A to 50E". It clearly meets the claimed one of three discrete outcomes.

In page 3, last paragraph, applicant states that ... had the Office reasonably considered the text of the Lin '235 specification, it would have been clear that the actuator of Lin does not have the same or equivalent structure as the actuator of instant claim 1. The examiner would provide the follow comments: had the Applicant reasonably considered the text of the Lin '235 specification, it would have been clear that the actuator of Lin meets every claimed limitations in claim 1.

In page 3, applicant further argues that a vertical depression the Lin actuator cannot be made to make just two contacts, as does the instant invention. The examiner likes to ask: where is your claim 1 claiming that "a vertical depression ... to make just two contacts"?

In page 3, applicant argues that "Lin only show two discrete outcomes", then in page 4, applicant argues that "Lin has five outcomes". Is applicant's argument contradicting itself?

In pages 5-6, applicant argues about Krishnan's figs. 1 and 2, the examiner likes to ask: what happen to Krishnan's fig. 7?

7. Applicant's arguments filed 12-12-03 have been fully considered but they are not persuasive. See rejections and argument above.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Chiang whose telephone number is 703-305-4728. The examiner can normally be reached on Mon.-Fri. from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

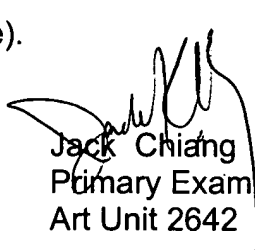
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jack Chiang
Primary Examiner
Art Unit 2642